

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT																		
NATURE OF CONVEYANCE:	ASSIGNMENT																		
CONVEYING PARTY DATA																			
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Thomas J. Richardson</td> <td>03/30/2012</td> </tr> <tr> <td>Saurabh Tavildar</td> <td>03/30/2012</td> </tr> <tr> <td>Simone Merlin</td> <td>04/26/2012</td> </tr> <tr> <td>Santosh Paul Abraham</td> <td>04/30/2012</td> </tr> <tr> <td>Zhibin Wu</td> <td>03/30/2012</td> </tr> <tr> <td>Junyi Li</td> <td>03/30/2012</td> </tr> <tr> <td>Nilesh N. Khude</td> <td>03/30/2012</td> </tr> <tr> <td>Hemanth Sampath</td> <td>04/30/2012</td> </tr> </tbody> </table>		Name	Execution Date	Thomas J. Richardson	03/30/2012	Saurabh Tavildar	03/30/2012	Simone Merlin	04/26/2012	Santosh Paul Abraham	04/30/2012	Zhibin Wu	03/30/2012	Junyi Li	03/30/2012	Nilesh N. Khude	03/30/2012	Hemanth Sampath	04/30/2012
Name	Execution Date																		
Thomas J. Richardson	03/30/2012																		
Saurabh Tavildar	03/30/2012																		
Simone Merlin	04/26/2012																		
Santosh Paul Abraham	04/30/2012																		
Zhibin Wu	03/30/2012																		
Junyi Li	03/30/2012																		
Nilesh N. Khude	03/30/2012																		
Hemanth Sampath	04/30/2012																		
RECEIVING PARTY DATA																			
Name:	QUALCOMM Incorporated																		
Street Address:	5775 Morehouse Drive																		
Internal Address:	Patent Department/Central Administration																		
City:	San Diego																		
State/Country:	CALIFORNIA																		
Postal Code:	92121																		
PROPERTY NUMBERS Total: 1																			
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13349245</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13349245														
Property Type	Number																		
Application Number:	13349245																		
CORRESPONDENCE DATA																			
Fax Number:	(858)658-2502																		
Phone:	858-845-4265																		
Email:	patent.docketing.us@qualcomm.com																		
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>																			
Correspondent Name:	QUALCOMM INCORPORATED																		
Address Line 1:	5775 MOREHOUSE DR.																		
Address Line 4:	SAN DIEGO, CALIFORNIA 92121																		

CH \$40.00 13349245

ATTORNEY DOCKET NUMBER:	113392
NAME OF SUBMITTER:	Gina Golia
<p>Total Attachments: 12</p> <p>source=113392_2012-06-06_ASST#page1.tif</p> <p>source=113392_2012-06-06_ASST#page2.tif</p> <p>source=113392_2012-06-06_ASST#page3.tif</p> <p>source=113392_2012-06-06_ASST#page4.tif</p> <p>source=113392_2012-06-06_ASST#page5.tif</p> <p>source=113392_2012-06-06_ASST#page6.tif</p> <p>source=113392_2012-06-06_ASST#page7.tif</p> <p>source=113392_2012-06-06_ASST#page8.tif</p> <p>source=113392_2012-06-06_ASST#page9.tif</p> <p>source=113392_2012-06-06_ASST#page10.tif</p> <p>source=113392_2012-06-06_ASST#page11.tif</p> <p>source=113392_2012-06-06_ASST#page12.tif</p>	

ASSIGNMENT

WHEREAS, WE,

1. **Thomas J. Richardson**, a citizen of the **United States of America**, having a mailing address of 5775 Morehouse Drive, San Diego, California, 92121, US; and a resident of **South Orange, New Jersey**;
2. **Saurabh Tavildar**, a citizen of **India**, having a mailing address of 5775 Morehouse Drive, San Diego, California, 92121, US; and a resident of **Jersey City, New Jersey**;
3. **Simone Merlin**, a citizen of **Italy**, having a mailing address of 5775 Morehouse Drive, San Diego, California, 92121, US; and a resident of **San Diego, California**;
4. **Santosh Paul Abraham**, a citizen of the **United States of America**, having a mailing address of 5775 Morehouse Drive, San Diego, California, 92121, US; and a resident of **San Diego, California**;
5. **Zhibin Wu**, a citizen of **China P.R.**, having a mailing address of 5775 Morehouse Drive, San Diego, California, 92121, US, and a resident of **Bedminster, New Jersey**;
6. **Junyi Li**, a citizen of the **United States of America**, having a mailing address of 5775 Morehouse Drive, San Diego, California, 92121, US, and a resident of **Chester, New Jersey**;
7. **Nilesh N. Khude**, a citizen of **India**, having a mailing address of 5775 Morehouse Drive, San Diego, California, 92121, US, and a resident of **Bridgewater, New Jersey**;
8. **Hemanth Sampath**, a citizen of the **United States of America**, having a mailing address of 5775 Morehouse Drive, San Diego, California, 92121, US; and a resident of **San Diego, California**

have conceived of one or more processes, methods, machines, articles of manufacture, designs, compositions of matter, inventions, discoveries or new or useful improvements relating to **METHOD AND APPARATUS FOR SYNCHRONIZING A WIRELESS NETWORK WITH AN EXTERNAL TIMING SOURCE** (collectively the "INVENTIONS") for which WE have executed and/or may execute one or more patent applications therefor; and

WHEREAS, QUALCOMM Incorporated (hereinafter "ASSIGNEE"), a Delaware corporation, having a place of business at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A., desires to acquire or otherwise obtain the entire right, title, and interest in and to said INVENTIONS, including all inventions related thereto or thereof, all patent applications therefor, and all patents that have granted or may be granted hereafter thereon, including but not limited to those identified below.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, WE do hereby acknowledge that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, the entire right, title, and interest throughout the world in and to said INVENTIONS, including all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in the United States, including but not limited to U.S. Application No(s). 13/349,245 filed January 12, 2012 Qualcomm Reference No. 113392 and all provisional applications relating thereto and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, and design applications thereof, and all issued patents of the United States which may have granted or may be granted hereafter thereon and all reissues, renewals, reexaminations, and extensions to any of the foregoing and all patents issuing thereon in the United States;

AND WE further do acknowledge and agree that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, all rights of priority under International Conventions, Treaties, or Agreements, and the entire right, title, and interest throughout the world in said INVENTIONS, including all inventions related thereto or thereof, and all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in any foreign country, countries, or treaty/union organizations, and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, patent of addition applications, confirmation applications, validation applications, utility model applications, and design applications thereof, and all issued patents which may have granted or may be granted hereafter for said INVENTIONS in any country or countries foreign to the United States, and all reissues, renewals, reexaminations, and extensions thereof;

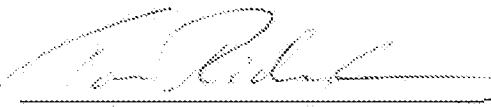
AND WE DO HEREBY authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications or registrations, to issue all patents for said INVENTIONS to said ASSIGNEE, its successors, its legal representatives and its assigns, in accordance with the terms of this instrument;

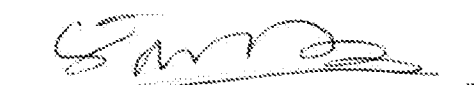
AND WE DO HEREBY sell, assign, transfer, and convey to said ASSIGNEE, its successors, its legal representatives, and its assigns all claims for damages and all remedies arising out of or relating to any violation(s) of any of the rights assigned hereby that have or may have accrued prior to the date of assignment to said ASSIGNEE, or may accrue hereafter, including, but not limited to the right to sue for, seek, obtain, collect, recover, and retain damages and any ongoing or prospective royalties to which WE may be entitled, or that WE may collect for any infringement or from any settlement or agreement related to any of said patents before or after issuance;

AND WE HEREBY covenant and agree that WE will communicate promptly to said ASSIGNEE, its successors, its legal representatives, and its assigns, any facts known to us respecting said INVENTIONS, and will testify in any legal proceeding, sign all lawful papers, execute all applications and certificates, make all rightful declarations and/or oaths, and provide

all lawful assistance to said ASSIGNEE, its successors, its legal representatives and its assigns, to obtain and enforce patent protection for said INVENTIONS in all countries;

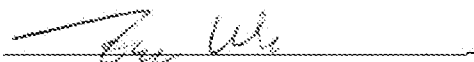
AND WE HEREBY represent that WE have full and exclusive, unencumbered right to sell, assign, convey and transfer all subject matter herein, and hereby covenant that WE have not and will not execute any writing or do any act whatsoever conflicting with these presents.


Done at Bridgewater, New Jersey on 3-30-12
LOCATION DATE

Thomas J. Richardson

Done at Bridgewater, New Jersey on 03/30/12
LOCATION DATE

Saurabh Tavildar

Done at San Diego, California on _____
LOCATION DATE
Simone Merlin

Done at San Diego, California on _____
LOCATION DATE
Santosh Paul Abraham

Done at Bridgewater, New Jersey on 03/30/12
LOCATION DATE

Zhibin Wu

Done at Bridgewater, New Jersey on _____
LOCATION DATE

Junyi Li

Done at Bridgewater, New Jersey on 03/30/12
LOCATION DATE

Nilesh N. Khude

Done at San Diego, California on _____
LOCATION DATE
Hemanth Sampath

ASSIGNMENT

WHEREAS, WE,

1. **Thomas J. Richardson**, a citizen of the **United States of America**, having a mailing address of 5775 Morehouse Drive, San Diego, California, 92121, US; and a resident of **South Orange, New Jersey**;
2. **Saurabh Tavildar**, a citizen of **India**, having a mailing address of 5775 Morehouse Drive, San Diego, California, 92121, US; and a resident of **Jersey City, New Jersey**;
3. **Simone Merlin**, a citizen of **Italy**, having a mailing address of 5775 Morehouse Drive, San Diego, California, 92121, US; and a resident of **San Diego, California**;
4. **Santosh Paul Abraham**, a citizen of the **United States of America**, having a mailing address of 5775 Morehouse Drive, San Diego, California, 92121, US; and a resident of **San Diego, California**;
5. **Zhibin Wu**, a citizen of **China P.R.**, having a mailing address of 5775 Morehouse Drive, San Diego, California, 92121, US, and a resident of **Bedminster, New Jersey**;
6. **Junyi Li**, a citizen of the **United States of America**, having a mailing address of 5775 Morehouse Drive, San Diego, California, 92121, US, and a resident of **Chester, New Jersey**;
7. **Nilesh N. Khude**, a citizen of **India**, having a mailing address of 5775 Morehouse Drive, San Diego, California, 92121, US, and a resident of **Bridgewater, New Jersey**;
8. **Hemant Sampath**, a citizen of the **United States of America**, having a mailing address of 5775 Morehouse Drive, San Diego, California, 92121, US; and a resident of **San Diego, California**

have conceived of one or more processes, methods, machines, articles of manufacture, designs, compositions of matter, inventions, discoveries or new or useful improvements relating to **METHOD AND APPARATUS FOR SYNCHRONIZING A WIRELESS NETWORK WITH AN EXTERNAL TIMING SOURCE** (collectively the "INVENTIONS") for which WE have executed and/or may execute one or more patent applications therefor; and

WHEREAS, QUALCOMM Incorporated (hereinafter "ASSIGNEE"), a Delaware corporation, having a place of business at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A., desires to acquire or otherwise obtain the entire right, title, and interest in and to said INVENTIONS, including all inventions related thereto or thereof, all patent applications therefor, and all patents that have granted or may be granted hereafter thereon, including but not limited to those identified below.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, WE do hereby acknowledge that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, the entire right, title, and interest throughout the world in and to said INVENTIONS, including all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in the United States, including but not limited to U.S. Application No(s). **13/349,245** filed **January 12, 2012** Qualcomm Reference No. **113392** and all provisional applications relating thereto and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, and design applications thereof, and all issued patents of the United States which may have granted or may be granted hereafter thereon and all reissues, renewals, reexaminations, and extensions to any of the foregoing and all patents issuing thereon in the United States;

AND WE further do acknowledge and agree that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, all rights of priority under International Conventions, Treaties, or Agreements, and the entire right, title, and interest throughout the world in said INVENTIONS, including all inventions related thereto or thereof, and all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in any foreign country, countries, or treaty/union organizations, and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, patent of addition applications, confirmation applications, validation applications, utility model applications, and design applications thereof, and all issued patents which may have granted or may be granted hereafter for said INVENTIONS in any country or countries foreign to the United States, and all reissues, renewals, reexaminations, and extensions thereof;

AND WE DO HEREBY authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications or registrations, to issue all patents for said INVENTIONS to said ASSIGNEE, its successors, its legal representatives and its assigns, in accordance with the terms of this instrument;

AND WE DO HEREBY sell, assign, transfer, and convey to said ASSIGNEE, its successors, its legal representatives, and its assigns all claims for damages and all remedies arising out of or relating to any violation(s) of any of the rights assigned hereby that have or may have accrued prior to the date of assignment to said ASSIGNEE, or may accrue hereafter, including, but not limited to the right to sue for, seek, obtain, collect, recover, and retain damages and any ongoing or prospective royalties to which WE may be entitled, or that WE may collect for any infringement or from any settlement or agreement related to any of said patents before or after issuance;

AND WE HEREBY covenant and agree that WE will communicate promptly to said ASSIGNEE, its successors, its legal representatives, and its assigns, any facts known to us respecting said INVENTIONS, and will testify in any legal proceeding, sign all lawful papers, execute all applications and certificates, make all rightful declarations and/or oaths, and provide

all lawful assistance to said ASSIGNEE, its successors, its legal representatives and its assigns, to obtain and enforce patent protection for said INVENTIONS in all countries;

AND WE HEREBY represent that WE have full and exclusive, unencumbered right to sell, assign, convey and transfer all subject matter herein, and hereby covenant that WE have not and will not execute any writing or do any act whatsoever conflicting with these presents.

Done at Bridgewater, California on _____
LOCATION DATE Thomas J. Richardson

Done at Bridgewater, New Jersey on _____
LOCATION DATE Saurabh Tavildar

Done at San Diego, California on 4/26/12
LOCATION DATE *Simone Merlin*
Simone Merlin

Done at San Diego, California on _____
LOCATION DATE Santosh Paul Abraham

Done at Bridgewater, New Jersey on _____
LOCATION DATE Zhibin Wu

Done at Bridgewater, New Jersey on _____
LOCATION DATE Junyi Li

Done at Bridgewater, New Jersey on _____
LOCATION DATE Nilesh N. Khude

Done at San Diego, California on _____
LOCATION DATE Hemanth Sampath

ASSIGNMENT

WHEREAS, WE,

1. **Thomas J. Richardson**, a citizen of the **United States of America**, having a mailing address of 5775 Morehouse Drive, San Diego, California, 92121, US; and a resident of **South Orange, New Jersey**;
2. **Saurabh Tavildar**, a citizen of **India**, having a mailing address of 5775 Morehouse Drive, San Diego, California, 92121, US; and a resident of **Jersey City, New Jersey**;
3. **Simone Merlin**, a citizen of **Italy**, having a mailing address of 5775 Morehouse Drive, San Diego, California, 92121, US; and a resident of **San Diego, California**;
4. **Santosh Paul Abraham**, a citizen of the **United States of America**, having a mailing address of 5775 Morehouse Drive, San Diego, California, 92121, US; and a resident of **San Diego, California**;
5. **Zhibin Wu**, a citizen of **China P.R.**, having a mailing address of 5775 Morehouse Drive, San Diego, California, 92121, US, and a resident of **Bedminster, New Jersey**;
6. **Junyi Li**, a citizen of the **United States of America**, having a mailing address of 5775 Morehouse Drive, San Diego, California, 92121, US, and a resident of **Chester, New Jersey**;
7. **Nilesh N. Khude**, a citizen of **India**, having a mailing address of 5775 Morehouse Drive, San Diego, California, 92121, US, and a resident of **Bridgewater, New Jersey**;
8. **Hemanth Sampath**, a citizen of the **United States of America**, having a mailing address of 5775 Morehouse Drive, San Diego, California, 92121, US; and a resident of **San Diego, California**

have conceived of one or more processes, methods, machines, articles of manufacture, designs, compositions of matter, inventions, discoveries or new or useful improvements relating to **METHOD AND APPARATUS FOR SYNCHRONIZING A WIRELESS NETWORK WITH AN EXTERNAL TIMING SOURCE** (collectively the "INVENTIONS") for which WE have executed and/or may execute one or more patent applications therefor; and

WHEREAS, QUALCOMM Incorporated (hereinafter "**ASSIGNEE**"), a Delaware corporation, having a place of business at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A., desires to acquire or otherwise obtain the entire right, title, and interest in and to said INVENTIONS, including all inventions related thereto or thereof, all patent applications therefor, and all patents that have granted or may be granted hereafter thereon, including but not limited to those identified below.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, WE do hereby acknowledge that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, the entire right, title, and interest throughout the world in and to said INVENTIONS, including all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in the United States, including but not limited to U.S. Application No(s). **13/349,245** filed **January 12, 2012** Qualcomm Reference No. **113392** and all provisional applications relating thereto and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, and design applications thereof, and all issued patents of the United States which may have granted or may be granted hereafter thereon and all reissues, renewals, reexaminations, and extensions to any of the foregoing and all patents issuing thereon in the United States;

AND WE further do acknowledge and agree that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, all rights of priority under International Conventions, Treaties, or Agreements, and the entire right, title, and interest throughout the world in said INVENTIONS, including all inventions related thereto or thereof, and all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in any foreign country, countries, or treaty/union organizations, and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, patent of addition applications, confirmation applications, validation applications, utility model applications, and design applications thereof, and all issued patents which may have granted or may be granted hereafter for said INVENTIONS in any country or countries foreign to the United States, and all reissues, renewals, reexaminations, and extensions thereof;

AND WE DO HEREBY authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications or registrations, to issue all patents for said INVENTIONS to said ASSIGNEE, its successors, its legal representatives and its assigns, in accordance with the terms of this instrument;

AND WE DO HEREBY sell, assign, transfer, and convey to said ASSIGNEE, its successors, its legal representatives, and its assigns all claims for damages and all remedies arising out of or relating to any violation(s) of any of the rights assigned hereby that have or may have accrued prior to the date of assignment to said ASSIGNEE, or may accrue hereafter, including, but not limited to the right to sue for, seek, obtain, collect, recover, and retain damages and any ongoing or prospective royalties to which WE may be entitled, or that WE may collect for any infringement or from any settlement or agreement related to any of said patents before or after issuance;

AND WE HEREBY covenant and agree that WE will communicate promptly to said ASSIGNEE, its successors, its legal representatives, and its assigns, any facts known to us respecting said INVENTIONS, and will testify in any legal proceeding, sign all lawful papers, execute all applications and certificates, make all rightful declarations and/or oaths, and provide

all lawful assistance to said ASSIGNEE, its successors, its legal representatives and its assigns, to obtain and enforce patent protection for said INVENTIONS in all countries;

AND WE HEREBY represent that WE have full and exclusive, unencumbered right to sell, assign, convey and transfer all subject matter herein, and hereby covenant that WE have not and will not execute any writing or do any act whatsoever conflicting with these presents.

Done at Bridgewater, California on _____
LOCATION DATE Thomas J. Richardson

Done at Bridgewater, New Jersey on _____
LOCATION DATE Saurabh Tavildar

Done at San Diego, California on _____
LOCATION DATE Simone Merlin

Done at San Diego, California on 4/30/2012
LOCATION DATE Santosh Paul Abraham

Done at Bridgewater, New Jersey on _____
LOCATION DATE Zhibin Wu

Done at Bridgewater, New Jersey on _____
LOCATION DATE Junyi Li

Done at Bridgewater, New Jersey on _____
LOCATION DATE Nilesh N. Khude

Done at San Diego, California on _____
LOCATION DATE Hemanth Sampath

ASSIGNMENT

WHEREAS, WE,

1. **Thomas J. Richardson**, a citizen of the **United States of America**, having a mailing address of 5775 Morehouse Drive, San Diego, California, 92121, US; and a resident of **South Orange, New Jersey**;
2. **Saurabh Tavildar**, a citizen of **India**, having a mailing address of 5775 Morehouse Drive, San Diego, California, 92121, US; and a resident of **Jersey City, New Jersey**;
3. **Simone Merlin**, a citizen of **Italy**, having a mailing address of 5775 Morehouse Drive, San Diego, California, 92121, US; and a resident of **San Diego, California**;
4. **Santosh Paul Abraham**, a citizen of the **United States of America**, having a mailing address of 5775 Morehouse Drive, San Diego, California, 92121, US; and a resident of **San Diego, California**;
5. **Zhibin Wu**, a citizen of **China P.R.**, having a mailing address of 5775 Morehouse Drive, San Diego, California, 92121, US, and a resident of **Bedminster, New Jersey**;
6. **Junyi Li**, a citizen of the **United States of America**, having a mailing address of 5775 Morehouse Drive, San Diego, California, 92121, US, and a resident of **Chester, New Jersey**;
7. **Nilesh N. Khude**, a citizen of **India**, having a mailing address of 5775 Morehouse Drive, San Diego, California, 92121, US, and a resident of **Bridgewater, New Jersey**;
8. **Hemanth Sampath**, a citizen of the **United States of America**, having a mailing address of 5775 Morehouse Drive, San Diego, California, 92121, US; and a resident of **San Diego, California**

have conceived of one or more processes, methods, machines, articles of manufacture, designs, compositions of matter, inventions, discoveries or new or useful improvements relating to **METHOD AND APPARATUS FOR SYNCHRONIZING A WIRELESS NETWORK WITH AN EXTERNAL TIMING SOURCE** (collectively the "INVENTIONS") for which WE have executed and/or may execute one or more patent applications therefor; and

WHEREAS, QUALCOMM Incorporated (hereinafter "ASSIGNEE"), a Delaware corporation, having a place of business at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A., desires to acquire or otherwise obtain the entire right, title, and interest in and to said INVENTIONS, including all inventions related thereto or thereof, all patent applications therefor, and all patents that have granted or may be granted hereafter thereon, including but not limited to those identified below.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, WE do hereby acknowledge that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, the entire right, title, and interest throughout the world in and to said INVENTIONS, including all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in the United States, including but not limited to U.S. Application No(s). 13/349,245 filed January 12, 2012 Qualcomm Reference No. 113392 and all provisional applications relating thereto and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, and design applications thereof, and all issued patents of the United States which may have granted or may be granted hereafter thereon and all reissues, renewals, reexaminations, and extensions to any of the foregoing and all patents issuing thereon in the United States;

AND WE further do acknowledge and agree that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, all rights of priority under International Conventions, Treaties, or Agreements, and the entire right, title, and interest throughout the world in said INVENTIONS, including all inventions related thereto or thereof, and all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in any foreign country, countries, or treaty/union organizations, and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, patent of addition applications, confirmation applications, validation applications, utility model applications, and design applications thereof, and all issued patents which may have granted or may be granted hereafter for said INVENTIONS in any country or countries foreign to the United States, and all reissues, renewals, reexaminations, and extensions thereof;

AND WE DO HEREBY authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications or registrations, to issue all patents for said INVENTIONS to said ASSIGNEE, its successors, its legal representatives and its assigns, in accordance with the terms of this instrument;

AND WE DO HEREBY sell, assign, transfer, and convey to said ASSIGNEE, its successors, its legal representatives, and its assigns all claims for damages and all remedies arising out of or relating to any violation(s) of any of the rights assigned hereby that have or may have accrued prior to the date of assignment to said ASSIGNEE, or may accrue hereafter, including, but not limited to the right to sue for, seek, obtain, collect, recover, and retain damages and any ongoing or prospective royalties to which WE may be entitled, or that WE may collect for any infringement or from any settlement or agreement related to any of said patents before or after issuance;

AND WE HEREBY covenant and agree that WE will communicate promptly to said ASSIGNEE, its successors, its legal representatives, and its assigns, any facts known to us respecting said INVENTIONS, and will testify in any legal proceeding, sign all lawful papers, execute all applications and certificates, make all rightful declarations and/or oaths, and provide

all lawful assistance to said ASSIGNEE, its successors, its legal representatives and its assigns, to obtain and enforce patent protection for said INVENTIONS in all countries;

AND WE HEREBY represent that WE have full and exclusive, unencumbered right to sell, assign, convey and transfer all subject matter herein, and hereby covenant that WE have not and will not execute any writing or do any act whatsoever conflicting with these presents.

Done at Bridgewater, California on _____
LOCATION DATE **Thomas J. Richardson**

Done at Bridgewater, New Jersey on _____
LOCATION DATE **Saurabh Tavildar**

Done at San Diego, California on _____
LOCATION DATE **Simone Merlin**

Done at San Diego, California on _____
LOCATION DATE **Santosh Paul Abraham**

Done at Bridgewater, New Jersey on _____
LOCATION DATE **Zhibin Wu**

Done at Bridgewater, New Jersey on _____
LOCATION DATE **Junyi Li**

Done at Bridgewater, New Jersey on _____
LOCATION DATE **Nilesh N. Khude**

Done at San Diego, California on 04/26/12
LOCATION DATE **Hemanth Sampath**